

PROCESS AUTOMATION



# PURGE AND PRESSURIZATION SYSTEM 5000Q SERIES



# WORKING TOGETHER WITH PEPPERL+FUCHS

## IN PRACTICE



Security surveillance is possible in hazardous areas with an encased camera and Pepperl+Fuchs' purge and pressurization system.



Pepperl+Fuchs' purge and pressurization systems support a wide range of plant floor PC-based process control solutions.



In hazardous locations, where flammable vapors, gases, and dust are present, Pepperl+Fuchs' 5000Q series helps prevent plant explosions.

## HAZARDOUS AREA APPLICATIONS EXPERIENCE

Purge and pressurization allows general-purpose equipment to operate in a hazardous area. This method of protection is not limited by the quantity, configuration, power requirements, or location of the protected equipment.

We also manufacture certified cabinet solutions to meet your exact installation requirements. Our purge application engineers have the design and implementation experience to guide you through the entire process, reducing your in-house engineering and documentation efforts. The purge enclosures are built in our state-of-the-art manufacturing facilities and shipped to your site ready for installation.

### Purge and Pressurization Advantages

- For applications ranging from Type X, Y, and Z to Ex [px] and Ex [pz]
- Class I,II,III; Division 1, 2; Zone 1/2/21/22

### Certified Enclosure Solutions

- Zone 1/2: Pepperl+Fuchs is able to certify complete solutions for Zone 1/21 for most applications based on the catalog certification ATEX BVS09 ATEX E 161
- Division 1/2: Pepperl+Fuchs is listed as panel shop under UL698A and UL 508A and will certify purge enclosures and cabinets
- Pre-assembled purge enclosures and cabinets

When purchasing from Pepperl+Fuchs you get more than a system. You also get our expertise and service. Our experts are available to assist with your application whenever and wherever you need it. We are The Leaders in Purging Technology®.



Weigh scale and filling equipment is typically located in or near the process area. Scales, filling, and printing equipment can be easily protected by a pressurized enclosure.



## THE LEADERS IN PURGING TECHNOLOGY®

Purge and pressurization systems are one of the most versatile explosion protection methods. These systems are commonly used for applications involving basic electronics, electrical equipment, motors, and switchgears. One of the best advantages of using a purge and pressurization system is the slow but continuous flow of protective gas, eliminating problems like heat, moisture, dust, and corrosion. These systems provide the means to operate general-purpose equipment in classified areas or in environments that are highly corrosive or dusty. During the purge process flammable gases are removed, thus preventing the accumulation of ignitable gases or dust within the enclosure(s). With a complete range of solutions for both Zone and Division applications, Pepperl+Fuchs offers the expertise and knowledge to satisfy the safety and operational requirements of today's process automation environments.

For more information about our complete line of purge and pressurization solutions, visit [www.pepperl-fuchs.com/purge](http://www.pepperl-fuchs.com/purge)

## COMPACT AND POWERFUL

The 5000Q is the latest Pepperl+Fuchs purge and pressurization product. The new series allows general-purpose equipment to be mounted in Ex p enclosures and operated safely in a Zone 2/22 hazardous area. Although it's designed to be small and compact, the 5000Q is a powerful and highly advanced system. It operates by controlling and monitoring compressed instrument air or inert gas through the protected enclosure to remove and prevent the accumulation of flammable gas, vapors, or dust. The temperature within the enclosure is monitored through the embedded 2-wire PT100 RTDs, and based on that temperature reading, different actions can be performed. The 5000Q is field configurable through a structured, menu-driven program. The display screen provides feedback about the status of the system.

### STANDARD MODEL APPLICATIONS

Model Number	5000Q Ex pz
Designation	Zone 2 + 22 protection, gas and dust
EX Approvals	II 3G Ex nAC[pz] IIC T4 -20 °C...+60 °C
	II 3G Ex nAC[pz] IIC T6 -20 °C...+60 °C
	II 3G Ex [pD] T 70 °C IP64
	ATEX to the EN60079-2 for gas, IEC61241-4 for dust, designated Ex pz



# Ex pz

## YOUR BENEFITS

### EASY TO USE

- Window provides a clear visual for LCD display and 5 LEDs for system status
- Simple pushbuttons make configuration fast

### HIGH PROCESS RELIABILITY

- Reduces heat build-up for equipment longevity
- Inhibits metal corrosion, prevents dust and moisture build-up
- Reduces the area classification within the enclosure
- Temperature control can initiate cooling to protect the electrical equipment inside the enclosure
- Automatic pressure compensation to prevent premature shutdowns
- Alarm output contact allows visualization of system status

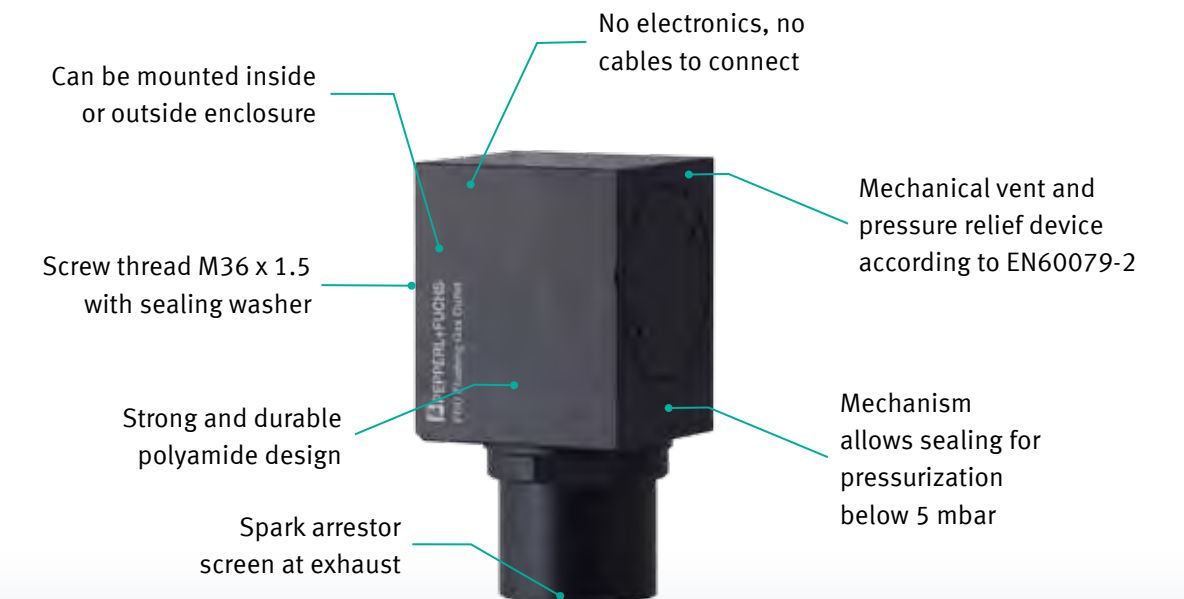
### HIGH FLEXIBILITY

- Five standard programs assist in the optimization of the purge and pressurization configuration process
- Vent can be mounted in any position, inside or outside the enclosure, to ensure optimal airflow



Compact and economical approach to operating equipment in a Zone 2 area

## EPV-5000Q VENT



# PROCESS AUTOMATION – PROTECTING YOUR PROCESS



For over a half century, Pepperl+Fuchs has provided new concepts for the world of process automation. Our company sets standards in quality and innovative technology. We develop, produce and distribute electronic interface modules, Human-Machine Interfaces and hazardous location protection equipment on a global scale, meeting the most demanding needs of industry. Our worldwide presence, combined with flexible operating systems in our production and service organizations, enable us to offer complete individual solutions – wherever and whenever you need us. We are the recognized experts in our technologies – Pepperl+Fuchs has earned a strong reputation by supplying the world's largest process industry companies with the broadest line of proven components for a diverse range of applications.

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